

[54] **EDGE CONNECTED THREE DIMENSIONAL STRUCTURES**

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[57] **ABSTRACT**

The invention comprises means of constructing insulated enclosures and structures for housing, storage, emergency shelter and vacation homes. The structural materials required comprise principally only two components, panels of plastic insulating foam and extruded plastic connectors.

The panels are shaped and sized to eliminate virtually all waste when cut from 4 foot by 8 foot sheets of rigid insulating foam. A single extruded connector joins the panels together along mutually adjacent edges and eliminates the need for complicated geometric connectors where three or more panels adjoin. The hinged configuration of the extruded connectors permits a virtually unlimited variety of structural enclosures to be constructed with 4 foot by 8 foot sheets of insulating foam plastic. Disclosed for illustration are a dome shaped structure with a plurality of alcoves extending outwardly from the periphery of the structure and other free form structures of "crystalline" shape.

The extruded connectors are formed with three integral hinges, two of which permit panels to be easily inserted into the connectors and the third accommodating a wide variety of angles between the intersecting panels.

17 Claims, 17 Drawing Figures

